

Notice of Allowability

Application No.

10/804,310

Examiner

Anh T.N. Vo

Applicant(s)

STOCKWELL ET AL.

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed on 5/15/2006.
2. ☒ The allowed claim(s) is/are 1-5, 7 and 9-21.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

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EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to an applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The following changes have been made in a subject of the application to place the claims in a condition for allowance:

Claims

In claim 11:

- lines 17 and 19, changed “;” to --:--.

In claim 13:

- line 11, inserted -- bubbles-- and --means for-- after “gas” and before “venting” respectively.

- line 12, inserted --through a vent port-- after “vessel”.

In claim 17:

- line 2, changed “;” to --:--.

- line 8, inserted --by periodically venting said bubble removal vessel-- after “port”.

In claim 21:

- line 17, changed “a vent” to --means-- ; “gas” to --gas bubbles--; and “said vent” to --said means--.

- line 19, changed “said vent” to --a vent port-- .

The above change was made to avoid unclear language and to place the application in better condition for allowance.

REASONS FOR ALLOWANCE

The following is an Examiner's Statement of Reasons for Allowance:

Claims 11-12 are allowed because none of the prior art references of record teaches a solid freeform fabrication apparatus for forming a three-dimensional object in a layerwise fashion by dispensing at least one material, the apparatus comprising means for normalizing layers of dispensed material thereby producing waste material and a material delivery means that includes an apparatus for removing gas bubbles from at least one material having means for venting gas bubbles from a vent port of a bubbles removal vessel in the combination as claimed.

Claims 13-16 are allowed because none of the prior art references of record teaches a method for removing gas bubbles from an ink-jet feed material for a selective deposition modeling system for producing three-dimensional parts, the method comprising a step of removing gas bubbles from a top of a bubble removal vessel by means for venting the bubble removal vessel through a vent port in the combination as claimed.

Claims 17-20 are allowed because none of the prior art references of record teaches an apparatus for removing gas bubbles from an ink-jet feed material for a selective deposition modeling system for producing three-dimensional parts comprising means for venting gas bubbles from a vent port by periodically venting a bubble removal vessel in the combination as claimed.

Claim 21 is allowed because none of the prior art references of record teaches a vessel for removing gas bubbles from an inkjet material comprising a level sensor for sensing a gas liquid interface in said vessel; and means for venting gas bubbles, the means responsive to the level sensor, whereby bubbles separated from the inkjet material can rise to the top of the inkjet material in the vessel and be removed from the vessel through a vent port in the combination as claimed.

CONCLUSION

Any comments considered necessarily by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue

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Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Anh Vo whose telephone number is (571) 272-2262. The examiner can normally be reached on Tuesday to Friday from 9:30 A.M. to 7:30 P.M.. The fax number of this Group 2800 is (571) 273-8300.



ANH T.N. VO
PRIMARY EXAMINER

February 16, 2006